

Use Attainability Analysis

for

WBID 0131 Elk Fork Salt River

Submitted by

Pickett Ray and Silver

To

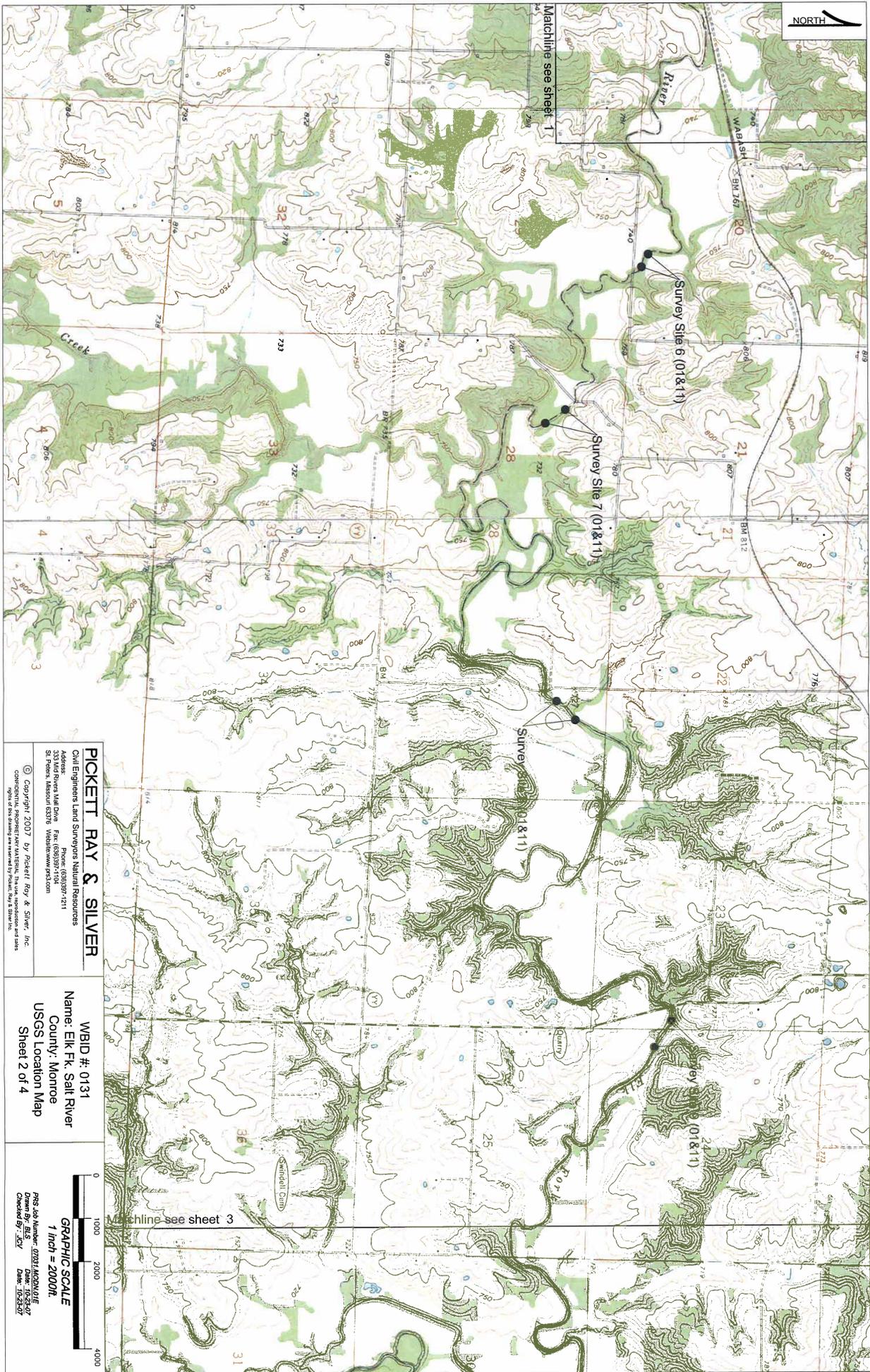
Missouri Department of Natural Resources

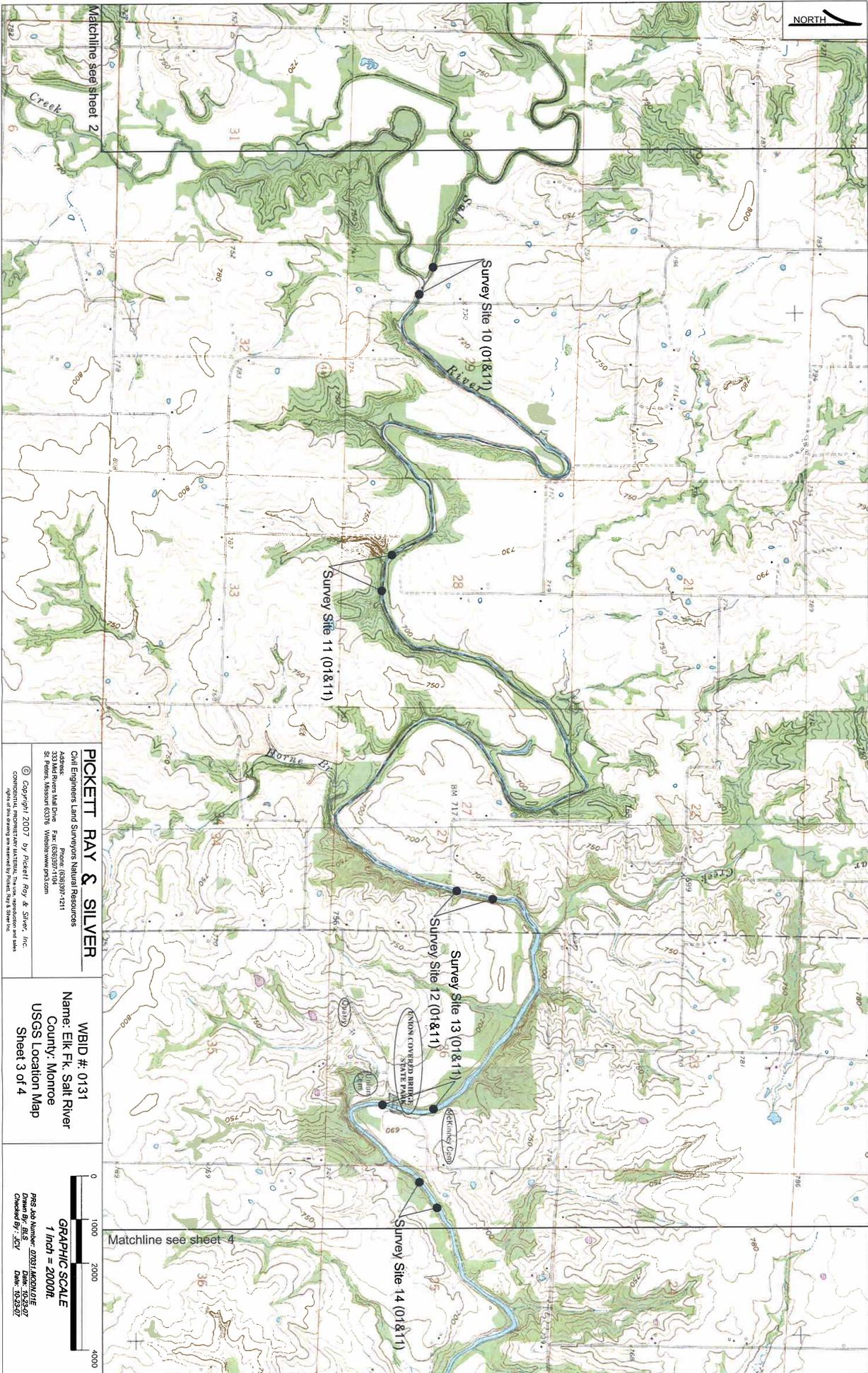
Water Protection Program

Date Received: October 31, 2007





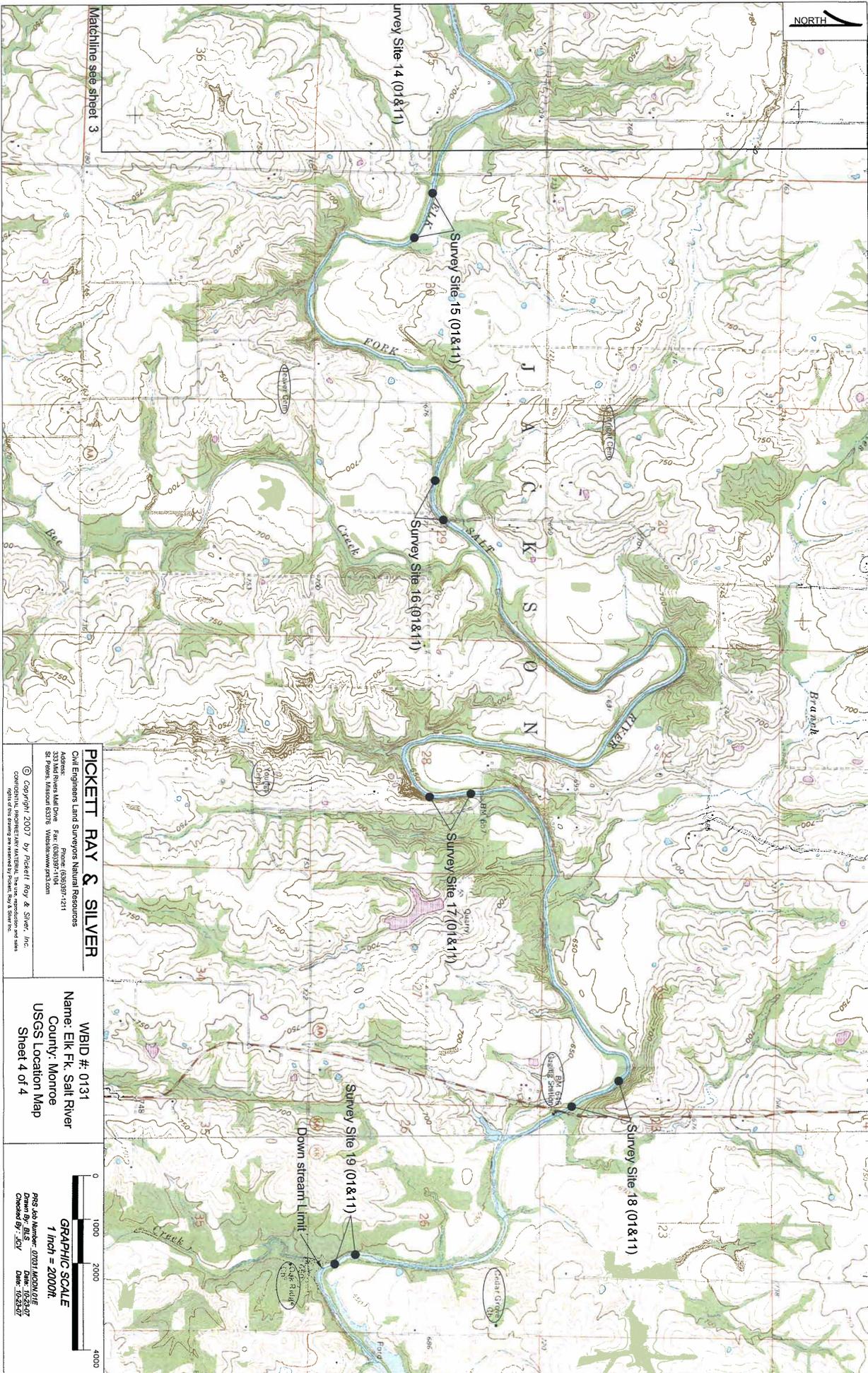




**POCKETT RAY & SILVER**  
 Civil Engineers Land Surveyors Natural Resources  
 Address: 3333 Market River Mall Drive Phone: (636)397-1211  
 St. Peters, Missouri 63376 Fax: (636)397-1104  
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WBID #: 0131  
 Name: Elk Fk Salt River  
 County: Monroe  
 USGS Location Map  
 Sheet 3 of 4

**GRAPHIC SCALE**  
 1 inch = 2000ft  
 PRS Job Number: 07031 MODN/01E  
 Drawn By: BLS  
 Checked By: JBY  
 Date: 10/23/07  
 Date: 10/23/07



**POCKETT RAY & SILVER**  
 Civil Engineers Land Surveyors Natural Resources  
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WBID #: 0131  
 Name: Elk Fk. Salt River  
 County: Monroe  
 USGS Location Map  
 Sheet 4 of 4



Field Data Sheets for Recreational Use Stream Surveys

**Data Sheet A – Water Body Identification**

**I. Water Body Information** (For water body being surveyed)

Water Body Name (from USGS 7.5' quad):	Elk Fork Salt River		
Missouri Water Body Identification (WBID) Number:	131		
8-digit HUC:	7110006	County:	Monroe
Upstream Legal Description (from Table H):	16,54N,13W		
Downstream Legal Description (from Table H):	26,54N,10W		
Number of sites evaluated:	19		
List all sites numbers, listed consequently upstream to downstream:	131-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19		

**Site Locations Map(s):** Attach a map of the entire segment with assessment sites clearly labeled. Mark any other items that may be of interest.

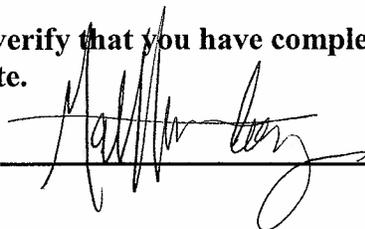
**II. Facility Information** (list all permitted discharges to the water body segment)

Facility Name(s) and Permit Number(s): Lake Village M00101056
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**III. UAA Surveyor** (please print legibly)

Name of Surveyor	Matt Cosby	Telephone Number:	636-397-1211
Organization/Employer:	PRS		

Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.

Signed:  Date: 10/18/07

WBID # 131  
 Site # 1

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization**

(must be completed for each site)

Date & Time: <u>10/18/07 9:00A</u>	Site Location Description (e.g., road crossing): <u>Downstream of rd King @ 1470</u>
Personnel (Data Collectors): <u>LS+MC</u>	Facility Name: <u>Lake Village</u>
Current Weather Conditions: <u>Sunny 65°F</u>	Permit Number: <u>M00101656</u>
Weather Conditions for Past 10 days: <u>4.9" Rain</u>	
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input checked="" type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): <u>554105 m</u>	Northing (UTM Y): <u>4370067 m</u>	Horizontal Accuracy: (EPE / FOM / <u>PDOP</u> ) <u>3.8</u> Meters
Site 11	Easting (UTM X): <u>554691 m</u>	Northing (UTM Y): <u>4369961 m</u>	Horizontal Accuracy: (EPE / FOM / <u>PDOP</u> ) <u>5.1</u> Meters

**Photos:** See attached photos & descriptions

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use *Data Sheet D- Recreational Use Interview* when conducting interviews.)

WBID # 131  
 Site # 1

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments:				

**Evidence of Human Use\*:** (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other: <i>None</i>				

**Substrate\*:** (These values should add up to 100%.)

% Cobble	<i>20</i>	% Gravel	<i>20</i>	% Sand	% Silt	<i>60</i>	% Mud/Clay	% Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

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**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input checked="" type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

WBID # 131

Site # 1

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature:  Date of Survey: 10/18/07  
Organization: PRS Position: Field team leader

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet C - Field Survey Results

Waterbody ID: <u>131</u>	Site #: <u>1</u>	<b>Dissolved Oxygen</b>
Estimated Channel Incision: <u>0</u> (m) (height between low bank width and water)		Date: <u>10/18/07</u> Time: <u>9:00A</u>
GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM)		
01 UTM X: <u>554105m</u>	UTM Y: <u>4370067m</u>	Dissolved Oxygen: <u>8.30</u> (mg/L)
11 UTM X: <u>554091m</u>	UTM Y: <u>4369961m</u>	Dissolved Oxygen: _____ (% sat)
Average Stream Width: <u>6</u> (meters)	Length of Survey Segment: <u>150</u> (meters)	Specific Cond: _____ (µS/cm)
(To determine Length of Reach)	(20x average stream width)	Water Temperature: <u>15.4</u> (°C)
Field Staff: <u>LSA MC</u>		

		<b>Transect Cross-Section</b>																						
Station	Distance (m)	01		02		03		04		05		06		07		08		09		10		11		
		Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)		
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Right Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Feature Type																								

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width. GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order. Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten). Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1). All measurements to be taken to the nearest 0.01 meter.

WBID # 131

Site # 2

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization**

(must be completed for each site)

Date & Time: <u>10/18/07</u> <u>9:00A</u>	Site Location Description (e.g., road crossing): <u>Downstream of rd King @ 1500</u>
Personnel (Data Collectors): <u>CS + MC</u>	Facility Name: <u>Lake Village</u>
Current Weather Conditions: <u>SUNNY 65°F</u>	Permit Number: <u>MO 010656</u>
Weather Conditions for Past 10 days: <u>4.9" rain</u>	
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input checked="" type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Location: See attached photos + descriptions

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): <u>555345m</u>	Northing (UTM Y): <u>4369408m</u>	Horizontal Accuracy: (EPE / FOM / <u>PDOP</u> ) <u>6.3</u> Meters
Site 11	Easting (UTM X): <u>555473m</u>	Northing (UTM Y): <u>4369420m</u>	Horizontal Accuracy: (EPE / FOM / <u>PDOP</u> ) <u>6.4</u> Meters

Photos: See attached photos + descriptions

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use Data Sheet D- Recreational Use Interview when conducting interviews.)

WBID # 131

Site # 2

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments:				

**Evidence of Human Use\*:** (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other:				
<i>None</i>				

**Substrate\*:** (These values should add up to 100%.)

% Cobble	<i>20</i>	% Gravel	<i>20</i>	% Sand	%	% Silt	<i>60</i>	% Mud/Clay	%	% Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

<i>None</i>
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**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input checked="" type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

WBID # 131  
Site # 2

**Field Data Sheets for Recreational Use Stream Surveys**

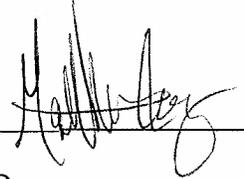
**Data Sheet B – Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature:  Date of Survey: 12/18/07  
Organization: PRS Position: Field Team Leader

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet C - Field Survey Results

Waterbody ID: 131 Site #: 2

Estimated Channel Incision: 0 (m) (height between low bank width and water)

GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM)  
 01 UTM X: 555345m UTM Y: 436418m ADOP 6.3 (meters)  
 11 UTM X: 555473m UTM Y: 436420m ADOP 6.4 (meters)

Average Stream Width: 6 (meters) Length of Survey Segment: 150 (meters)  
 (To determine Length of Reach) (20x average stream width)

Field Staff: LS + MC

**Dissolved Oxygen**

Date: 16/18/07 Time: 9:00A

Dissolved Oxygen: 7.41 (mg/L)

Dissolved Oxygen: \_\_\_\_\_ (% sat)

Specific Condi: \_\_\_\_\_ (µS/cm)

Water Temperature: 15.6 (°C)

**Transect Cross-Section**

Station	01		02		03		04		05		06		07		08		09		10		11		
	Distance (m)	Depth (m)																					
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7.1	1.7	8.7	1.7	9.5	1.7	10.2	1.7	11.0	1.7	11.8	1.7	12.6	1.7	13.4	1.7	14.2	1.7	15.0	1.7	15.8	1.7	16.6
		2.6		2.6		2.6		2.6		2.6		2.6		2.6		2.6		2.6		2.6		2.6	
		3.5		3.5		3.5		3.5		3.5		3.5		3.5		3.5		3.5		3.5		3.5	
		4.4		4.4		4.4		4.4		4.4		4.4		4.4		4.4		4.4		4.4		4.4	
		5.2		5.2		5.2		5.2		5.2		5.2		5.2		5.2		5.2		5.2		5.2	
		6.1		6.1		6.1		6.1		6.1		6.1		6.1		6.1		6.1		6.1		6.1	
		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0	
		7.8		7.8		7.8		7.8		7.8		7.8		7.8		7.8		7.8		7.8		7.8	
		8.7		8.7		8.7		8.7		8.7		8.7		8.7		8.7		8.7		8.7		8.7	
Right Bank	15.0	0	15.7	0	16.4	0	17.1	0	17.8	0	18.5	0	19.2	0	19.9	0	20.6	0	21.3	0	22.0	0	22.7
Feature Type (riffle, run, or pool)	run	run	pool	run	run	run	run																

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width. GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order. Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten). Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1). All measurements to be taken to the nearest 0.01 meter.

WBID # 131  
 Site # 3

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization**  
 (must be completed for each site)

Date & Time: <u>10/18/07 10:00A</u>	Site Location Description (e.g., road crossing): <u>Downstream of Rd King @ 1510</u>
Personnel (Data Collectors): <u>LS &amp; MC</u>	Facility Name: <u>Lake Village</u>
Current Weather Conditions: <u>Sunny 70</u>	Permit Number: <u>MO 0101656</u>
Weather Conditions for Past 10 days: <u>4.9" rain</u>	
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input checked="" type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): <u>556163m</u>	Northing (UTM Y): <u>4369700m</u>	Horizontal Accuracy: (EPE / FOM / <u>PDOP</u> ) <u>4.4</u> Meters
Site 11	Easting (UTM X): <u>556276m</u>	Northing (UTM Y): <u>4369650</u>	Horizontal Accuracy: (EPE / FOM / <u>PDOP</u> ) <u>5.5</u> Meters

**Photos:** See attached photos + descriptions

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:
Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use Data Sheet D- Recreational Use Interview when conducting interviews.)				

WBID # 131  
 Site # 3

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments:				

**Evidence of Human Use\*:** (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other:  <i>None</i>				

**Substrate\*:** (These values should add up to 100%.)

% Cobble	<i>33</i> % Gravel	<i>33</i> % Sand	% Silt	<i>33</i> % Mud/Clay	% Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

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**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

WBID # 131  
Site # 3

**Field Data Sheets for Recreational Use Stream Surveys**

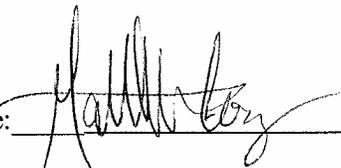
**Data Sheet B – Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature:  Date of Survey: 10/18/07  
Organization: PLS Position: Field Team Leader

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet C - Field Survey Results

Waterbody ID: 131 Site #: 3

Estimated Channel Incision: 0 (m) (height between low bank width and water)

GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM)  
 01 UTM X: 556163m UTM Y: 4369700m ~~4369700m~~  
 11 UTM X: 556276m UTM Y: 4369650m ~~4369650m~~

Average Stream Width: 6 (meters) Length of Survey Segment: 150 (meters)  
 (To determine Length of Reach) (20x average stream width)

Field Staff: LS+MC

**Dissolved Oxygen**

Date: 12/18/07 Time: 10:01A  
 Dissolved Oxygen: 7.38 (mg/L)  
 Dissolved Oxygen: \_\_\_\_\_ (% sat)  
 Specific Cond: \_\_\_\_\_ (µS/cm)  
 Water Temperature: 15.0 (°C)

**Transect Cross-Section**

Station	01		02		03		04		05		06		07		08		09		10		11		
	Distance (m)	Depth (m)																					
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	71	71	71	71	88	61	71	71	88	61	71	71	71	71	71	71	71	71	71	71	71	71	71
2					1.8	62			1.8	62													21
3					26	80			26	80													21
4					35	82			35	82													31
5					44	85			44	85													37
6					53	72			53	72													53
7					62	50			62	50													58
8					70	58			70	58													54
9					79	36			79	36													40
Right Bank	0	25	0	26	0	27	0	27	0	28	0	28	0	28	0	28	0	28	0	28	0	28	0
Feature Type	Run	Run	Run	Run	Pool	Pool	Pool																

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width.

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

Station: \_\_\_\_\_ Date: \_\_\_\_\_

WBID # 131  
 Site # 4

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization**  
 (must be completed for each site)

Date & Time: <u>10/17/07</u>	Site Location Description (e.g., road crossing):
Personnel (Data Collectors): <u>WCLS</u>	<u>Downstream of Hwy 23 22</u>
Current Weather Conditions: <u>Cloudy 65°</u>	Facility Name: <u>Lake Village</u>
Weather Conditions for Past 10 days: <u>4.29" rain</u>	Permit Number: <u>MO 0101656</u>
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input checked="" type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)					
Site 01	Easting (UTM X): <u>557383 m</u>	Northing (UTM Y): <u>4368675 m</u>	Horizontal Accuracy: (EPE / FOM / PDOP) <u>3.3</u> <del>Meters</del>		
Site 11	Easting (UTM X): <u>557406 m</u>	Northing (UTM Y): <u>4368595 m</u>	Horizontal Accuracy: (EPE / FOM / PDOP) <u>5.5</u> <del>Meters</del>		

**Photos:** See attached photos & descriptions

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:
Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use Data Sheet D- Recreational Use Interview when conducting interviews.)				

WBID # 131  
 Site # 4

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments:				

**Evidence of Human Use\*:** (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input checked="" type="checkbox"/> Livestock Watering
Comments / Other:				

**Substrate\*:** (These values should add up to 100%.)

% Cobble	<u>10</u> % Gravel	% Sand	% Silt	<u>90</u> % Mud/Clay	% Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

<u>None</u>
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**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input checked="" type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input checked="" type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

WBID # 131  
Site # 4

**Field Data Sheets for Recreational Use Stream Surveys**

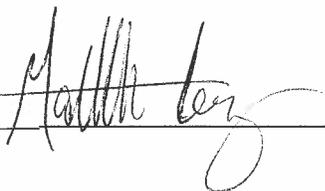
**Data Sheet B – Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature:  Date of Survey: 10/17/07  
Organization: PRS Position: Field Team Leader

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet C - Field Survey Results

Waterbody ID: <u>131</u> Site #: <u>4</u> Estimated Channel Incision: <u>1</u> (m) (height between low bank width and water) GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM) 01 UTM X: <u>557383m</u> UTM Y: <u>41368675m</u> <del>4028</del> <u>3.3</u> (meters) 11 UTM X: <u>557406m</u> UTM Y: <u>4368555m</u> <del>4028</del> <u>5.5</u> (meters)	Dissolved Oxygen Date: <u>10/17/07</u> Time: <u>4:30</u> Dissolved Oxygen: <u>2.66</u> (mg/L) Dissolved Oxygen: _____ (% sat) Specific Cond: _____ (µS/cm) Water Temperature: <u>16.8</u> (°C)
Average Stream Width: <u>3</u> (meters) Length of Survey Segment: <u>150</u> (meters) (To determine Length of Reach) (20x average stream width)	
Field Staff: <u>MC &amp; LS</u>	

		Transect Cross-Section										
		01	02	03	04	05	06	07	08	09	10	11
Station	Left Bank	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)
		Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)
		0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
1		.11	.27	.17	.06	.23	.16	.43	.09	.29	.11	.18
2		.22	.05	.54	.17	.34	.02	.46	.20	.86	.16	.39
3		.33	.01	.81	.21	.51	.04	.69	.23	.13	.38	.90
4		.44	.42	1.1	.26	.68	.05	.92	.21	1.7	.44	1.2
5		.55	.03	1.4	.37	.85	.04	1.2	.18	2.2	.46	1.5
6		.66	.02	1.6	.41	1.6	.10	1.7	.14	2.6	.62	1.8
7		.77	.02	1.9	.42	1.2	.14	1.6	.07	3.0	.64	2.1
8		.88	.02	2.2	.51	1.4	.04	1.8	.07	3.4	.36	2.4
9		.99	.01	2.4	.48	1.5	.05	2.1	.58	3.9	.38	2.7
		1.1	0	2.7	0	1.7	0	2.3	0	4.3	0	2.9
	Right Bank	riffle	pool	run	pool	run	pool	run	pool	pool	pool	pool
	Feature Type	riffle	pool	run	pool	run	pool	run	pool	pool	pool	pool
	(riffle, run, or pool)											

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width. GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order. Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten). Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1). All measurements to be taken to the nearest 0.01 meter.

WBID # 131  
 Site # 5

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization**

(must be completed for each site)

Date & Time: <u>10/17/07 3:30 PM</u>	Site Location Description (e.g., road crossing): <u>Downstream of Rd. 2324</u>
Personnel (Data Collectors): <u>MCLS</u>	Facility Name: <u>Lake Village</u>
Current Weather Conditions: <u>Cloudy 70°</u>	Permit Number: <u>MO 0101656</u>
Weather Conditions for Past 10 days: <u>4.29" rain</u>	
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input checked="" type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): <u>559743m</u>	Northing (UTM Y): <u>4367734m</u>	Horizontal Accuracy: (EPE / FOM / <u>PDOP</u> ) <u>5.6</u> Meters
Site 11	Easting (UTM X): <u>559805m</u>	Northing (UTM Y): <u>4367723m</u>	Horizontal Accuracy: (EPE / FOM / <u>PDOP</u> ) <u>3.7</u> Meters

**Photos:** See attached photos & descriptions

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use Data Sheet D- Recreational Use Interview when conducting interviews.)

WBID # 131  
 Site # 5

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments:				

**Evidence of Human Use\*:** (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other: <i>none</i>				

**Substrate\*:** (These values should add up to 100%.)

% Cobble	% Gravel	% Sand	<i>30</i>	% Silt	<i>60</i>	% Mud/Clay	<i>10</i>	% Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

<i>Duckweed, Algae</i>
------------------------

**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input checked="" type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input checked="" type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input checked="" type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input type="checkbox"/> None	<input type="checkbox"/> Other:

*Low vegetation*

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

WBID # 131  
Site # 5

**Field Data Sheets for Recreational Use Stream Surveys**

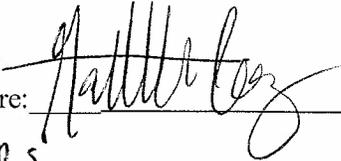
**Data Sheet B – Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature:  Date of Survey: 10/17/07  
Organization: PRS Position: Field Team Leader

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet C - Field Survey Results

Waterbody ID: 131 Site #: 5

Estimated Channel Incision: 1.0 (m) (height between low bank width and water)

GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM)  
 01 UTM X: 559743m UTM Y: 4367734m ~~PPD~~ 5.6 (meters)  
 11 UTM X: 559805m UTM Y: 4367723m ~~PPD~~ 3.7 (meters)

Average Stream Width: 4 (meters) Length of Survey Segment: 150 (meters)  
 (To determine Length of Reach) (20x average stream width)

Field Staff: MCLS

**Dissolved Oxygen**

Date: 10/17/07 Time: 3:30

Dissolved Oxygen: 4.18 (mg/L)

Dissolved Oxygen: \_\_\_\_\_ (% sat)

Specific Cond: \_\_\_\_\_ (µS/cm)

Water Temperature: 15.1 (°C)

**Transect Cross-Section**

Station	01		02		03		04		05		06		07		08		09		10		11		
	Distance (m)	Depth (m)																					
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	1.17	0.5	1.2	0.37	0.8	0.16	0.55	0.04	0.7	0.1	1.0	0.7	0.1	0.7	0.1	0.7	0.1	0.7	0.1	0.7	0.1	0.7	0.1
3	2.34	1.2	1.8	0.46	1.3	0.24	1.1	0.41	1.7	0.12	1.0	0.34	1.1	0.10	1.0	0.34	1.1	0.10	1.0	0.34	1.1	0.10	1.0
4	3.51	1.5	1.8	0.46	1.3	0.24	1.1	0.41	1.7	0.12	1.0	0.34	1.1	0.10	1.0	0.34	1.1	0.10	1.0	0.34	1.1	0.10	1.0
5	4.68	1.8	2.4	0.52	1.7	0.35	1.5	0.44	2.2	0.20	2.0	0.44	2.2	0.20	2.0	0.44	2.2	0.20	2.0	0.44	2.2	0.20	2.0
6	5.85	2.5	3.0	0.61	2.2	0.41	1.9	0.52	2.8	0.26	2.6	0.52	2.8	0.26	2.6	0.52	2.8	0.26	2.6	0.52	2.8	0.26	2.6
7	7.0	2.7	3.6	0.58	2.6	0.52	2.2	0.53	3.3	0.28	3.0	0.53	3.3	0.28	3.0	0.53	3.3	0.28	3.0	0.53	3.3	0.28	3.0
8	8.17	3.1	4.2	0.53	3.0	0.46	2.6	0.41	3.9	0.30	3.0	0.46	2.6	0.41	3.9	0.30	3.0	0.46	2.6	0.41	3.9	0.30	3.0
9	9.34	3.0	4.8	0.42	3.4	0.20	3.0	0.35	4.4	0.36	3.6	0.35	4.4	0.36	3.6	0.35	4.4	0.36	3.6	0.35	4.4	0.36	3.6
10	10.51	2.9	5.4	0.31	3.9	0.10	3.3	0.27	5.0	0.34	5.0	0.34	5.0	0.34	5.0	0.34	5.0	0.34	5.0	0.34	5.0	0.34	5.0
11	11.7	0	5.9	0	4.3	0	3.7	0	9.5	0	2.5	0	2.4	0	2.4	0	2.4	0	2.4	0	2.4	0	2.4
Right Bank	run	run	pool	run	run	run	run																

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width.

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

Date: \_\_\_\_\_  
 Station: \_\_\_\_\_

WBID # 131  
 Site # 6

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization**  
 (must be completed for each site)

Date & Time: <u>12/18/07 12:00pm</u>	Site Location Description (e.g., road crossing): <u>Upstream of Rd Xing @ 1033</u>
Personnel (Data Collectors): <u>LS MC</u>	Facility Name: <u>Lake Village</u>
Current Weather Conditions: <u>Sunny 70°</u>	Permit Number: <u>MO 0101656</u>
Weather Conditions for Past 10 days: <u>4.9" rain</u>	
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input checked="" type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): <u>562629m</u>	Northing (UTM Y): <u>4366931m</u>	Horizontal Accuracy: (EPE / FOM / <u>PDOP</u> ) <u>21</u> Meters
Site 11	Easting (UTM X): <u>562756m</u>	Northing (UTM Y): <u>4366856m</u>	Horizontal Accuracy: (EPE / FOM / <u>PDOP</u> ) <u>39</u> Meters

**Photos:** See attached photos + descriptions

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use *Data Sheet D- Recreational Use Interview* when conducting interviews.)

WBID # 131  
 Site # 6

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other:
Comments:  				

**Evidence of Human Use\*:** (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other:  <i>None</i>				

**Substrate\*:** (These values should add up to 100%.)

% Cobble	<i>40</i> % Gravel	<del>10</del> % Sand	% Silt	<i>40</i> % Mud/Clay	% Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

<i>None</i>
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**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

WBID # 131

Site # 6

**Field Data Sheets for Recreational Use Stream Surveys**

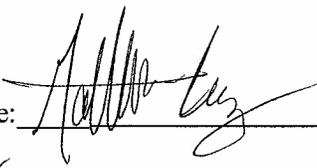
**Data Sheet B – Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature:  Date of Survey: 10/18/07  
Organization: PRS Position: Field Team Leader

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet C - Field Survey Results

Waterbody ID: 131 Site #: 6

Estimated Channel Incision: 0 (m) (height between low bank width and water)

GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM)  
 01 UTM X: 562629 m UTM Y: 4366931 m (meters)  
 11 UTM X: 562750 m UTM Y: 4366850 m (meters)

Average Stream Width: 8 (meters) Length of Survey Segment: 160 (meters)  
 (To determine Length of Reach) (20x average stream width)

Dissolved Oxygen  
 Date: 10/18/07 Time: 12:00 pm  
 Dissolved Oxygen: 7.51 (mg/L)  
 Dissolved Oxygen: \_\_\_\_\_ (% sat)  
 Specific Cond: \_\_\_\_\_ (µS/cm)  
 Water Temperature: 15.6 (°C)

Field Staff: LS + MC

### Transect Cross-Section

Station	01		02		03		04		05		06		07		08		09		10		11	
	Distance (m)	Depth (m)																				
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		>1		>1		>1		>1		>1		>1		>1		>1		>1		>1		>1
Right Bank	28	0	10	0	20	0	28	0	28	0	28	0	28	0	27	0	28	0	28	0	28	0
Feature Type (riffle, run, or pool)	Run	Pool	Pool	Pool	Run	Run	Run	Run	Run	Run	Run	Run										

Notes: Transects will be measured beginning on left descending bank (0 depth), and finishing on right descending bank (0 depth). This width is the wetted width.

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by 10)

Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

WBID # 131  
 Site # 7

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization**

(must be completed for each site)

Date & Time: <u>10/18/07 1:00pm</u>	Site Location Description (e.g., road crossing): <u>Downstream of Rd Xing @ #043</u>
Personnel (Data Collectors): <u>MC LS</u>	
Current Weather Conditions: <u>Sunny, 70°F</u>	Facility Name: <u>Lake Village</u>
Weather Conditions for Past 10 days: <u>49" rain</u>	Permit Number: <u>MO 0101656</u>
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input checked="" type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): <u>563744 m</u>	Northing (UTM Y): <u>4366320 m</u>	Horizontal Accuracy: (EPE / FOM / PDOP) <u>4.5</u> Meters
Site 11	Easting (UTM X): <u>563831 m</u>	Northing (UTM Y): <u>4366191 m</u>	Horizontal Accuracy: (EPE / FOM / PDOP) <u>4.7</u> Meters

**Photos:** See attached photos & descriptions

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:
Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use Data Sheet D- Recreational Use Interview when conducting interviews.)				

WBID # 131  
 Site # 7

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments:				

**Evidence of Human Use\*:** (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other: <i>None</i>				

**Substrate\*:** (These values should add up to 100%.)

% Cobble	<i>40</i> % Gravel	% Sand	% Silt	<i>60</i> % Mud/Clay	% Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

<i>None</i>				
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**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

WBID # 131

Site # 7

**Field Data Sheets for Recreational Use Stream Surveys**

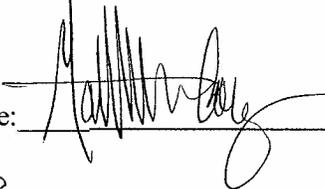
**Data Sheet B – Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature:  Date of Survey: 10/18/07  
Organization: PRS Position: Field Team Leader

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet C - Field Survey Results

CS

Waterbody ID: 131 Site #: 7

Estimated Channel Incision: 0 (m) (height between low bank width and water)

GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM)  
 01 UTM X: 563744m UTM Y: 4366320m PDOP: 5.5 (meters)  
 11 UTM X: 563831m UTM Y: 4366191m PDOP: 4.7 (meters)

Average Stream Width: 8 (meters) Length of Survey Segment: 160 (meters)  
 (To determine Length of Reach) (20x average stream width)

Field Staff: MCTLS

**Dissolved Oxygen**

Date: 10/18/07 Time: 1:00

Dissolved Oxygen: 7.38 (mg/L)

Dissolved Oxygen: \_\_\_\_\_ (% sat)

Specific Cond: \_\_\_\_\_ (µS/cm)

Water Temperature: 15.5 (°C)

		Transect Cross-Section										
		01	02	03	04	05	06	07	08	09	10	11
Station	Feature Type (riffle, run, or pool)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)
		Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)
1	run	>1	>1	>1	>1	>1	sk	>1	>1	>1	>1	>1
2												
3												
4												
5												
6												
7												
8												
9												
	run	0 27	0 27	0 24	0 26	0 27	0 29	0 26	0 29	0 29	0 28	0 28
	run	run	run	run	run	run	run	run	run	run	run	run

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width. GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order. Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten). Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1). All measurements to be taken to the nearest 0.01 meter.

WBID # 131  
 Site # 8

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization**

(must be completed for each site)

Date & Time: <u>10/18/07 2:00 pm</u>	Site Location Description (e.g., road crossing): <u>Downstream of rd crossing at 1073</u>
Personnel (Data Collectors): <u>LS MC</u>	
Current Weather Conditions: <u>SUNNY 75°F</u>	Facility Name: <u>Lake Village <del>HOOT</del></u>
Weather Conditions for Past 10 days: <u>4.9" rain</u>	Permit Number: <u>MO0101650</u>
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input checked="" type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): <u>565797 m</u>	Northing (UTM Y): <u>4366278 m</u>	Horizontal Accuracy: (EPE / FOM / <u>PDOP</u> ) <u>4.4</u> Meters
Site 11	Easting (UTM X): <u>565933 m</u>	Northing (UTM Y): <u>4366427 m</u>	Horizontal Accuracy: (EPE / FOM / <u>PDOP</u> ) <u>5.1</u> Meters

**Photos:** See attached photos + descriptions

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:
Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use <i>Data Sheet D- Recreational Use Interview</i> when conducting interviews.)				

WBID # 131  
 Site # 8

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input checked="" type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other:
Comments:  <i>[Handwritten signature]</i>				

**Evidence of Human Use\*:** (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other:  <i>None</i>				

**Substrate\*:** (These values should add up to 100%.)

% Cobble	<i>30</i> % Gravel	% Sand	% Silt	<i>60</i> % Mud/Clay	<i>10</i> % Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

<i>None</i>
-------------

**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input checked="" type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

WBID # 131  
Site # 8

**Field Data Sheets for Recreational Use Stream Surveys**

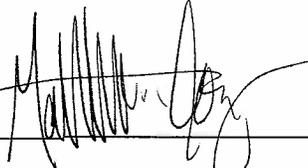
**Data Sheet B – Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature:  Date of Survey: 10/10/07  
Organization: PRS Position: Field Team Leader

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet C - Field Survey Results

Waterbody ID: 131 Site #: 8

Estimated Channel Incision: 0 (m) (height between low bank width and water)

GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM)  
 01 UTM X: 565797m UTM Y: 4366278m PDOP: 4.4 (meters)  
 11 UTM X: 565133m UTM Y: 4366427m PDOP: 5.1 (meters)

Average Stream Width: 10 (meters) Length of Survey Segment: 200 (meters)  
 (To determine Length of Reach) (20x average stream width)

Dissolved Oxygen: 16.69 (mg/L)  
 Dissolved Oxygen: \_\_\_\_\_ (% sat)  
 Specific Cond: \_\_\_\_\_ (µS/cm)  
 Water Temperature: 15.5 (°C)

Field Staff: LS + MC

**Dissolved Oxygen**

Date: 10/18/07 Time: 2:00pm

**Transect Cross-Section**

Station	01		02		03		04		05		06		07		08		09		10		11		
	Distance (m)	Depth (m)																					
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
Right Bank	28	0	29	0	210	0	212	0	210	0	212	0	212	0	212	0	212	0	210	0	210	0	210
Feature Type (riffle, run, or pool)	pool	run	run	run	run	run	pool	run	run	run	run	run	run	pool	run	run	run	run	run	run	run	run	run

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width. GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order. Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten). Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1). All measurements to be taken to the nearest 0.01 meter.

WBID # 131  
 Site # 9

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization**

(must be completed for each site)

Date & Time: <u>10/18/07</u> <u>3:00 pm</u>	Site Location Description (e.g., road crossing): <u>Downstream of Red King @ Hwy 151</u>
Personnel (Data Collectors): <u>LS MC</u>	Facility Name: <u>Lake Village</u>
Current Weather Conditions: <u>Sunny 75°F</u>	Permit Number: <u>MO 010656</u>
Weather Conditions for Past 10 days: <u>4.9" rain</u>	
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input checked="" type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): <u>568061 m</u>	Northing (UTM Y): <u>4367681 m</u>	Horizontal Accuracy: (EPE / FOM / PDOP) <u>3.0</u> Meters
Site 11	Easting (UTM X): <u>568244 m</u>	Northing (UTM Y): <u>4366968 m</u>	Horizontal Accuracy: (EPE / FOM / PDOP) <u>5.7</u> Meters

**Photos:** See attached photos + descriptions

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use Data Sheet D- Recreational Use Interview when conducting interviews.)

WBID # 131  
 Site # 9

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments:				

**Evidence of Human Use\*:** (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other: <i>None</i>				

**Substrate\*:** (These values should add up to 100%.)

% Cobble	<i>30</i> % Gravel	% Sand	% Silt	<i>60</i> % Mud/Clay	<i>10</i> % Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

<i>Rockweed</i>
-----------------

**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input checked="" type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input checked="" type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

WBID # 131  
Site # 9

**Field Data Sheets for Recreational Use Stream Surveys**

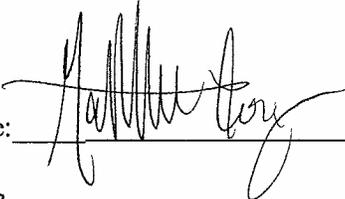
**Data Sheet B – Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature:  Date of Survey: 10/18/07  
Organization: PRS Position: Field Team Leader

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet C - Field Survey Results

Waterbody ID: <u>131</u>	Site #: <u>9</u>	Dissolved Oxygen	
Estimated Channel Incision: <u>40</u> (m) (height between low bank width and water)	Date: <u>10/18/07</u>	Time: <u>3:00 pm</u>	
GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM)	Dissolved Oxygen: <u>7.21</u> (mg/L)		
01 UTM X: <u>568661m</u> UTM Y: <u>4367081m</u> ( <del>4367081m</del> )	Dissolved Oxygen: _____ (% sat)		
11 UTM X: <u>568244m</u> UTM Y: <u>4366968m</u> ( <del>4366968m</del> )	Specific Cond: _____ (µS/cm)		
Average Stream Width: <u>10</u> (meters)	Length of Survey Segment: <u>200</u> (meters)		
(To determine Length of Reach)	(20x average stream width)		
Field Staff: <u>US &amp; MC</u>			

Station	Transect Cross-Section										
	01	02	03	04	05	06	07	08	09	10	11
Left Bank	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)
		Depth (m)									
1	0	0	0	0	0	0	0	0	0	0	0
2	0.12	0.71	0.09	1.2	2.2	>1	>1	>1	>1	>1	>1
3	2.0	1.4	2.0	2.0	1.5	2.4	4.3				
4	3.0	2.8	2.1	2.1	3.0	1.6	3.6	6.0			
5	4.0	3.9	2.8	2.4	4.0	1.8	4.8	6.6			
6	5.0	4.0	3.5	2.3	5.0	3.6	6.0	6.0			
7	6.0	4.0	4.2	2.2	6.0	3.1	7.2	5.4			
8	7.0	3.0	4.9	1.7	7.0	2.6	8.4	5.4			
9	8.0	2.1	5.6	1.5	8.0	2.4	9.6	4.9			
10	9.0	0.9	6.3	1.4	9.0	2.2	10.8	4.4			
11	10.0	0	7.1	0	9.9	0	12.2	0	2.0	2.0	2.1
Right Bank	Run	Run	Run	Run	Pod	Pool	Pool	Pool	Run	Run	Run
Feature Type (riffle, run, or pool)											

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width. GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order. Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten). Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1). All measurements to be taken to the nearest 0.01 meter.

WBID # 131  
 Site # 10

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization**

(must be completed for each site)

Date & Time: <u>10/18/07 4:00 pm</u>	Site Location Description (e.g., road crossing): <u>Upstream of Rd King @ Hwy AA</u>
Personnel (Data Collectors): <u>MC+LS</u>	Facility Name: <u>Village Lake Village</u>
Current Weather Conditions: <u>P. Cloudy 75°F</u>	Permit Number: <u>MO 010456</u>
Weather Conditions for Past 10 days: <u>4.9" rain</u>	
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input checked="" type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): <u>571378m</u>	Northing (UTM Y): <u>4365438m</u>	Horizontal Accuracy: (EPE / FOM / <u>PDOP</u> ) <u>6.3</u> Meters
Site 11	Easting (UTM X): <u>571558m</u>	Northing (UTM Y): <u>4365352m</u>	Horizontal Accuracy: (EPE / FOM / <u>PDOP</u> ) <u>4.6</u> Meters

**Photos:** See attached photos + descriptions

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:
Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use Data Sheet D- Recreational Use Interview when conducting interviews.)				

WBID # 131

Site # 10

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments:				

**Evidence of Human Use\*:** (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other: <i>None</i>				

**Substrate\*:** (These values should add up to 100%.)

% Cobble	<i>20</i> % Gravel	% Sand	% Silt	<i>70</i> % Mud/Clay	<i>10</i> % Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

<i>Duck weed covering 75% water at 1st 3 transects</i>
--

**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input checked="" type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

WBID # 131  
Site # 10

**Field Data Sheets for Recreational Use Stream Surveys**

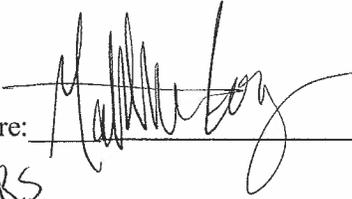
**Data Sheet B – Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature:  Date of Survey: 10/18/07  
Organization: PRS Position: Field Team Leader



WBID # 131

Site # 11

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization**

(must be completed for each site)

Date & Time: <u>10/19/07 8:00A</u>	Site Location Description (e.g., road crossing):
Personnel (Data Collectors): <u>CS &amp; MC</u>	<u>Downstream of access @ 971</u>
Current Weather Conditions: <u>Sunny 55°F</u>	Facility Name: <u>Lake Village</u>
Weather Conditions for Past 10 days: <u>499" rain</u>	Permit Number: <u>MO 0101656</u>
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input checked="" type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): <u>573376 m</u>	Northing (UTM Y): <u>4365225 m</u>	Horizontal Accuracy: (EPE / FOM / PDOP) <u>7.0 Meters</u>
Site 11	Easting (UTM X): <u>573638 m</u>	Northing (UTM Y): <u>4365122 m</u>	Horizontal Accuracy: (EPE / FOM / PDOP) <u>4.2 Meters</u>

**Photos:** See attached photos + descriptions

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:
Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use Data Sheet D- Recreational Use Interview when conducting interviews.)				

WBID # 131

Site # 11

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input checked="" type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments:				

**Evidence of Human Use\*:** (Attach photos and reference in "Photos" section)

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other:				

**Substrate\*:** (These values should add up to 100%.)

<u>40</u> % Cobble	<u>40</u> % Gravel	% Sand	% Silt	% Mud/Clay	<u>20</u> % Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

<u>Smartweed</u> <u>Aquatic Reeds</u>
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**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input checked="" type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

WBID # 131  
Site # 11

**Field Data Sheets for Recreational Use Stream Surveys**

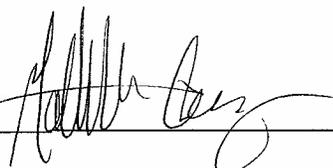
**Data Sheet B – Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature:  Date of Survey: 10/19/07  
Organization: PRS Position: Field Team Leader

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet C - Field Survey Results

LS

Waterbody ID: <u>131</u> Site #: <u>11</u> Estimated Channel Incision: <u>0</u> (m) (height between low bank width and water) GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate PDOP <b>01</b> UTM X: <u>573376m</u> UTM Y: <u>4365225m</u> +/- <u>7.0</u> <b>11</b> UTM X: <u>573638m</u> UTM Y: <u>4365122m</u> +/- <u>4.2</u>	Date: <u>10/19/07</u> Time: <u>8:00</u> am Dissolved Oxygen: <u>7.12</u> (mg/L) Dissolved Oxygen: _____ (% sat) Specific Cond: _____ (µS/cm) Water Temperature: <u>15.6</u> (°C)
Average Stream Width: <u>20</u> (meters)      Length of Survey Segment: <u>300</u> (meters) (To determine Length of Reach) (20x average stream width)	Field Staff: <u>Matt Cosby and Lauren Strange</u>

**Dissolved Oxygen**

Station		Transect Cross-Section																					
		01		02		03		04		05		06		07		08		09		10		11	
Feature Type (riffle, run, or pool)	Run	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)
			Run	20	0	20	0	20	0	20	0	20	0	15	0	15	0	20	0	20	0	20	0
	Run	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1
1																							
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
	Run	20	0	20	0	20	0	15	0	15	0	20	0	20	0	20	0	20	0	20	0	15	0

**Right Bank**

**Feature Type**  
(riffle, run, or pool)

**Notes:** Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width. GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order. Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten). Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as >1). All measurements to be taken to the nearest 0.01 meter.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

WBID # 131  
 Site # 12

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization**

(must be completed for each site)

Date & Time: <u>10/19/07</u> <u>9:00 AM</u>	Site Location Description (e.g., road crossing):
Personnel (Data Collectors): <u>LS MC</u>	<u>Downstream of access @ 985</u>
Current Weather Conditions: <u>Sunny 60°F</u>	Facility Name: <u>Lake Village</u>
Weather Conditions for Past 10 days: <u>4.99" rain</u>	Permit Number: <u>MO 0101656</u>
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input checked="" type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): <u>575775 m</u>	Northing (UTM Y): <u>4365614 m</u>	Horizontal Accuracy: (EPE / FOM / <u>PDOP</u> ) <u>5.7</u> Meters
Site 11	Easting (UTM X): <u>575766 m</u>	Northing (UTM Y): <u>4365889 m</u>	Horizontal Accuracy: (EPE / FOM / <u>PDOP</u> ) <u>5.0</u> Meters

**Photos:** See attached photos + descriptions

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:
Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use Data Sheet D- Recreational Use Interview when conducting interviews.)				

WBID # 131

Site # 12

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments:				

**Evidence of Human Use\*:** (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other: <i>None</i>				

**Substrate\*:** (These values should add up to 100%.)

<i>33</i> % Cobble	<i>33</i> % Gravel	<i>33</i> % Sand	% Silt	% Mud/Clay	% Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

<i>None</i>
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**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input checked="" type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

WBID # 131  
Site # 12

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature:  Date of Survey: 10/19/07  
Organization: PRS Position: Field Team Leader

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet C - Field Survey Results

Waterbody ID: <u>131</u> Site #: <u>12</u> Estimated Channel Incision: <u>0</u> (m) (height between low bank width and water) GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM) 01 UTM X: <u>575675 m</u> UTM Y: <u>4365614 m</u> PDOP: <u>5.7</u> (meters) 11 UTM X: <u>575766 m</u> UTM Y: <u>4365889 m</u> PDOP: <u>5.0</u> (meters) Average Stream Width: <u>20</u> (meters) Length of Survey Segment: <u>300</u> (meters) (To determine Length of Reach) (20x average stream width) Field Staff: <u>LS + MC</u>	Dissolved Oxygen Date: <u>10/18/07</u> Time: <u>9 AM</u> Dissolved Oxygen: <u>7.43</u> (mg/L) Dissolved Oxygen: _____ (% sat) Specific Cond: _____ (µS/cm) Water Temperature: <u>15.4</u> (°C)
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		Transect Cross-Section																					
Station	Distance (m)	01		02		03		04		05		06		07		08		09		10		11	
		Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	>1		>1		>1		>1		>1		>1		>1		>1		>1		>1		>1	
	2																						
	3																						
	4																						
	5																						
	6																						
	7																						
	8																						
	9																						
Right Bank	0	run	run	run	run	run	run	run	run	run	run	run	run	run	run	run	run	run	run	run	run	run	run
Feature Type																							
		(riffle, run, or pool)																					

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width  
 GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.  
 Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)  
 Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)  
 All measurements to be taken to the nearest 0.01 meter.

WBID # 131  
 Site # 13

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization**

(must be completed for each site)

Date & Time: <u>10/19/07 9:30 A</u>	Site Location Description (e.g., road crossing): <u>stream</u> <u>Downstream of rafting @ Union Covered Bridge state historic site</u>
Personnel (Data Collectors): <u>LS MC</u>	Facility Name: <u>Lalce Village</u>
Current Weather Conditions: <u>Sunny 60 windy</u>	Permit Number: <u>MO 0101656</u>
Weather Conditions for Past 10 days: <u>4.99" rain</u>	
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): <u>577284 m</u>	Northing (UTM Y): <u>4365468 m</u>	Horizontal Accuracy: (EPE / FOM / PDOP) <u>4.7 Meters</u>
Site 11	Easting (UTM X): <u>577226 m</u>	Northing (UTM Y): <u>4365169 m</u>	Horizontal Accuracy: (EPE / FOM / PDOP) <u>5.2 Meters</u>

**Photos:** see attached photos + descriptions

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:
Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use Data Sheet D- Recreational Use Interview when conducting interviews.)				

WBID # 131  
 Site # 13

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other:
Comments: <i>State historic site</i>				

**Evidence of Human Use\*:** (Attach photos and reference in "Photos" section)

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input checked="" type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other: <i>Fishing line / weight</i>				

**Substrate\*:** (These values should add up to 100%.)

<u>60</u> % Cobble	<u>20</u> % Gravel	<u>20</u> % Sand	% Silt	% Mud/Clay	<u>20</u> % Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

<i>Grasses, smartweed mostly near <del>bridge</del> crossing at covered bridge</i>
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**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input checked="" type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

WBID # 131  
Site # 13

**Field Data Sheets for Recreational Use Stream Surveys**

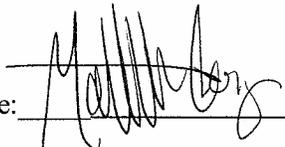
**Data Sheet B – Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature:  Date of Survey: 10/19/07  
Organization: PRS Position: Field Team Leader

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet C - Field Survey Results

Waterbody ID: <u>131</u> Site #: <u>13</u>		Dissolved Oxygen Date: <u>10/19/07</u> Time: <u>9:30A</u>	
Estimated Channel Incision: <u>0</u> (m) (height between low bank width and water)		Dissolved Oxygen: <u>6.64</u> (mg/L)	
GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM)			
01 UTM X: <u>577284 m</u> UTM Y: <u>43654684</u> PDOP: <u>4.7</u> (meters)		Dissolved Oxygen: _____ (% sat)	
11 UTM X: <u>577224 m</u> UTM Y: <u>4365469 m</u> PDOP: <u>5.2</u> (meters)		Specific Cond: _____ (µS/cm)	
Average Stream Width: <u>20</u> (meters) Length of Survey Segment: <u>300</u> (meters)		Water Temperature: <u>16.2</u> (°C)	
(To determine Length of Reach)			
Field Staff: <u>US mc</u>			

Transect Cross-Section																							
Station	01		02		03		04		05		06		07		08		09		10		11		
	Distance (m)	Depth (m)																					
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9	20	0	20	0	20	0	20	0	20	0	20	0	20	0	20	0	20	0	20	0	20	0	20
Right Bank	Run	Run	Run																				

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width. GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

WBID # 131  
 Site # 14

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization**

(must be completed for each site)

Date & Time: <u>10/19/07 10:30A</u>	Site Location Description (e.g., road crossing): <u>Downstream of Roxing @ Hwy C</u>
Personnel (Data Collectors): <u>CS MC</u>	Facility Name: <u>Lake Village</u>
Current Weather Conditions: <u>Sunny, 60°F</u>	Permit Number: <u>MO 0101656</u>
Weather Conditions for Past 10 days: <u>4.99" rain</u>	
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input checked="" type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): <u>577764m</u>	Northing (UTM Y): <u>4365387m</u>	Horizontal Accuracy: (EPE / FOM / <u>PDOP</u> ) <u>5.1</u> Meters
Site 11	Easting (UTM X): <u>579164m</u>	Northing (UTM Y): <u>4365910m</u>	Horizontal Accuracy: (EPE / FOM / <u>PDOP</u> ) <u>7.0</u> Meters

**Photos:** see attached photos + descriptions

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use Data Sheet D- Recreational Use Interview when conducting interviews.)

WBID # 131  
 Site # 14

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments:				

**Evidence of Human Use\*:** (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input checked="" type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other:				

**Substrate\*:** (These values should add up to 100%.)

<u>45</u> % Cobble	<u>45</u> % Gravel	% Sand	% Silt	% Mud/Clay	<u>10</u> % Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

Algae covering 80% of bottom  
 Smartweed along banks, occasionally in riffles ~~to~~  
 40% coverage

**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input checked="" type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet C - Field Survey Results

Waterbody ID: <u>131</u> Site #: <u>14</u> Estimated Channel Incision: <u>0.3</u> (m) (height between low bank width and water) GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM) 01 UTM X: <u>577764 m</u> UTM Y: <u>1365387 m</u> PDOP <u>5.1</u> (meters) 11 UTM X: <u>577964 m</u> UTM Y: <u>1365510 m</u> PDOP <u>7.0</u> (meters) Average Stream Width: <u>10</u> (meters)      Length of Survey Segment: <u>200</u> (meters) (To determine Length of Reach) (20x average stream width) Field Staff: <u>LS MC</u>	Dissolved Oxygen Date: <u>10/19/07</u> Time: <u>10:30A</u> Dissolved Oxygen: <u>7.51</u> (mg/L) Dissolved Oxygen: _____ (% sat) Specific Cond: _____ (µS/cm) Water Temperature: <u>15.1</u> (°C)
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		Transect Cross-Section																					
Station	Left Bank	01		02		03		04		05		06		07		08		09		10		11	
		Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		9.6	1.0	1.3	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1
		1.9	2.1	2.6	2.2	2.8	1.3	3.0	6.6						3.6	3.4							
		2.9	2.6	3.9	2.1	4.2	1.2	4.5	5.2						5.4	3.9							
		3.8	3.4	5.2	1.4	5.6	1.5	6.0	4.1						7.2	3.2							
		4.8	3.0	6.5	1.1	7.0	1.3	7.5	2.4						9.0	3.4							
		5.8	2.5	7.8	0.9	8.4	1.4	9.0	2.2						10.8	3.2							
		6.7	2.1	9.1	0.3	9.8	1.1	10.5	2.1						12.6	2.8							
		7.7	1.5	10.4	0.5	11.2	0.5	12.0	1.0						14.4	2.1							
		8.6	0.5	11.7	0.2	12.6	0.1	13.5	0.5						16.2	1.0							
		9.6	0	13.2	0	13.5	0	15.2	0	16.0	0	16.0	0	18.0	0	18.0	0	18.0	0	18.0	0	18.0	0
	Right Bank	Riffle	Riffle	Riffle	Riffle	Riffle	Riffle	Run	Run	Pool	Pool	Pool	Pool	Run	Run	Pool	Pool	Pool	Pool	Run	Run	Run	Run

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width.  
 GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.  
 Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)  
 Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)  
 All measurements to be taken to the nearest 0.01 meter.

WBID # 131  
Site # 14

**Field Data Sheets for Recreational Use Stream Surveys**

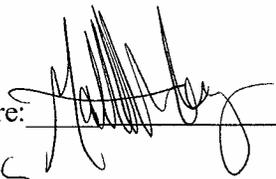
**Data Sheet B – Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature:  Date of Survey: 10/19/07  
Organization: PRS Position: Field Team Leader

WBID # 131  
 Site # 15

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization**

(must be completed for each site)

Date & Time: <u>10/19/07 12:00 pm</u>	Site Location Description (e.g., road crossing): <u>Downstream of Rd Xing @ 230</u>
Personnel (Data Collectors): <u>LS ME</u>	Facility Name: <u>Lake Village</u>
Current Weather Conditions: <u>Sunny 65°F</u>	Permit Number: <u>MO 0101656</u>
Weather Conditions for Past 10 days: <u>4.99" rain</u>	
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input checked="" type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): <u>579446.0m</u>	Northing (UTM Y): <u>4365486m</u>	Horizontal Accuracy: (EPE / FOM / PDOP) <u>4.7</u> Meters
Site 11	Easting (UTM X): <u>579743.m</u>	Northing (UTM Y): <u>4365357m</u>	Horizontal Accuracy: (EPE / FOM / PDOP) <u>4.8</u> Meters

**Photos:** See attached photos + descriptions

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use *Data Sheet D- Recreational Use Interview* when conducting interviews.)

WBID # 131  
 Site # 15

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments:				

**Evidence of Human Use\*:** (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other: <i>None</i>				

**Substrate\*:** (These values should add up to 100%.)

<i>25</i> % Cobble	<i>25</i> % Gravel	<i>25</i> % Sand	% Silt	<i>25</i> % Mud/Clay	% Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

<i>Dockweed, smartweed, along banks</i> <i>Algae covering ~80%</i>
---

**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input checked="" type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

WBID # 131  
Site # 15

**Field Data Sheets for Recreational Use Stream Surveys**

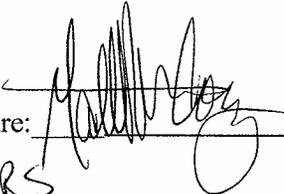
**Data Sheet B – Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature:  Date of Survey: 10/19/07  
Organization: PRS Position: Field Team Leader

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet C - Field Survey Results

Waterbody ID: <u>131</u> Site #: <u>15</u>		Date: <u>10/19/07</u> Time: <u>12:00 pm</u>	
Estimated Channel Incision: <u>1</u> (m) (height between low bank width and water)		Dissolved Oxygen: <u>8.79</u> (mg/L)	
GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM)		Dissolved Oxygen: _____ (% sat)	
01 UTM X: <u>579440 m</u> UTM Y: <u>4365486 m</u> PDOP: <u>4.4</u> (meters)		Specific Cond: _____ (µS/cm)	
11 UTM X: <u>579743 m</u> UTM Y: <u>4365357 m</u> PDOP: <u>4.8</u> (meters)		Water Temperature: <u>17.1</u> (°C)	
Average Stream Width: <u>5</u> (meters)		Length of Survey Segment: <u>300</u> (meters)	
(To determine Length of Reach)		(20x average stream width)	
Field Staff: <u>LS + MC</u>			

Station	Transect Cross-Section										
	01	02	03	04	05	06	07	08	09	10	11
Left Bank	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)
	1	0	0	0	0	0	0	0	0	0	0
2	1.4	4.9	1.3	2.7	7.6	2.3	5.0	8.2	6.9	2.1	6.1
3	2.6	5.4	2.9	5.3	2.8	5.0	6.3	4.1	6.4	5.2	5.4
4	3.9	2.6	4.4	1.6	4.1	4.5	8.2	7.0	6.2	7.1	7.9
5	5.2	3.2	5.8	6.0	5.5	4.9	10.9	5.0	9.4	4.4	8.3
6	6.5	2.4	7.3	5.1	6.9	5.0	13.7	4.1	11.7	4.0	11.3
7	7.8	2.0	8.7	5.0	8.3	5.0	16.4	4.2	14.0	3.8	12.4
8	9.1	2.3	10.2	4.1	9.7	4.3	19.1	5.3	16.4	4.4	14.5
9	10.4	2.5	11.6	4.0	11.0	3.0	21.8	5.1	18.7	4.4	16.6
10	11.7	2.1	13.1	2.2	12.4	1.5	24.6	4.0	21.0	3.8	18.6
11	13.8	0	14.5	0	13.8	0	27.3	0	25.4	0	20.7
Right Bank	0	0	0	0	0	0	0	0	0	0	0
Feature Type	Riffle	Run	Pool								
(riffle, run, or pool)											

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width. GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order. Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten). Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1). All measurements to be taken to the nearest 0.01 meter.

WBID # 131  
 Site # 16

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization**

(must be completed for each site)

Date & Time: <u>10/19/07 1:00pm</u>	Site Location Description (e.g., road crossing): <u>Upstream of Public Fishing Access - Cedar Bluff CA (MDE)</u>
Personnel (Data Collectors): <u>LS + MC</u>	
Current Weather Conditions: <u>Sunny, 65°F</u>	Facility Name: <u>Lake Village</u>
Weather Conditions for Past 10 days: <u>4.99" Rain</u>	Permit Number: <u>MO 0101656</u>
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input checked="" type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): <u>581413 m</u>	Northing (UTM Y): <u>4365511</u>	Horizontal Accuracy: (EPE / FOM / PDOP) <u>52</u> Meters
Site 11	Easting (UTM X): <u>581726 m</u>	Northing (UTM Y): <u>4365578</u>	Horizontal Accuracy: (EPE / FOM / PDOP) <u>41</u> Meters

**Photos:** See attached photos + descriptions

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use *Data Sheet D- Recreational Use Interview* when conducting interviews.)

WBID # 131  
 Site # 14

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input checked="" type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments:				

**Evidence of Human Use\*:** (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other: <i>None</i>				

**Substrate\*:** (These values should add up to 100%.)

<i>30</i> % Cobble	<i>30</i> % Gravel	<i>20</i> % Sand	% Silt	% Mud/Clay	<i>20</i> % Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

<i>Smartweed and Duckweed along banks</i> <i>Algae</i>
---

**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input checked="" type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input checked="" type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

WBID # 131

Site # 10

**Field Data Sheets for Recreational Use Stream Surveys**

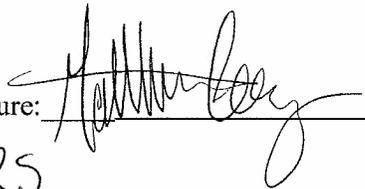
**Data Sheet B – Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature:  Date of Survey: 10/19/07  
Organization: PRS Position: Field Team Leader

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet C - Field Survey Results

Waterbody ID: 131 Site #: 16

Estimated Channel Incision: 0 (m) (height between low bank width and water)

Dissolved Oxygen

Date: 10/19/07 Time: 1:30 pm

Dissolved Oxygen: 8.06 (mg/L)

Dissolved Oxygen: \_\_\_\_\_ (% sat)

Specific Condi: \_\_\_\_\_ (µS/cm)

Water Temperature: 16.0 (°C)

GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM)

01 UTM X: 581443m UTM Y: 4365511m PDOP 5.2 (meters)

11 UTM X: 581726m UTM Y: 4365578m PDOP 4.1 (meters)

Average Stream Width: 20 (meters) Length of Survey Segment: 30 (meters)

(To determine Length of Reach) (20x average stream width)

Field Staff: LS & MC

		Transect Cross-Section																						
Station	Distance (m)	01		02		03		04		05		06		07		08		09		10		11		
		Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1	2.0	.41	>1	1.8	.25	1.5	.56	1.8	.35	1.5	.56	1.8	.35	>1	1.5	.35	2.0	.66	>1	1.9	.22	0	
	2	4.0	.43		3.6	.30	3.1	.58	3.6	.44	3.0	.30	3.6	.44		3.0	.30	4.0	.20		4.0	.29	0	
	3	6.0	.42		5.4	.31	4.6	.71	5.4	.43	4.5	.40	5.4	.43		4.5	.40	6.0	.54		6.0	.33	0	
	4	8.0	.36		7.2	.25	6.1	.76	7.2	.49	6.0	.43	7.2	.49		6.0	.43	8.0	.66		8.0	.32	0	
	5	10.0	.32		9.0	.24	7.7	.69	9.0	.52	7.5	.35	9.0	.52		7.5	.35	10.0	.80		10.0	.49	0	
	6	12.0	.24		10.8	.23	9.2	.59	10.8	.54	9.0	.54	10.8	.54		9.0	.54	12.0	.73		12.0	.71	0	
	7	14.0	.19		12.6	.20	10.7	.59	12.6	.56	10.5	.33	12.6	.56		10.5	.33	14.0	.66		14.0	.64	0	
	8	16.0	.15		14.4	.11	12.2	.51	14.4	.59	12.0	.75	14.4	.59		12.0	.75	16.0	.54		16.0	.45	0	
	9	18.0	.10		16.2	.05	13.8	.32	16.2	.41	13.5	.22	16.2	.41		13.5	.22	18.0	.34		18.0	.40	0	
Right Bank	19	0	20	0	20	0	17.9	0	18.1	0	15.3	0	18.1	0	12	0	15.4	0	19.6	0	20	0	19.2	0
Feature Type		Riffle	Pool	Pool	Riffle	Pool	Pool	Pool	Riffle	Pool	Pool	Pool												

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width.

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

WBID # 131  
 Site # 17

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization**  
 (must be completed for each site)

Date & Time: <u>10/19/07 2:00pm</u>	Site Location Description (e.g., road crossing): <u>Upstream of Rd Xing @ CR 222</u>
Personnel (Data Collectors): <u>LS MC</u>	Facility Name: <u>Lake Village</u>
Current Weather Conditions: <u>Sunny, 70 windy</u>	Permit Number: <u>MO 0101656</u>
Weather Conditions for Past 10 days: <u>4.99" rain</u>	
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input checked="" type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site <u>11</u>	Easting (UTM X): <u>583630 m</u>	Northing (UTM Y): <u>4365816 m</u>	Horizontal Accuracy: (EPE / FOM / PDOP) <u>4.5</u> <del>Meters</del>
Site <u>01</u>	Easting (UTM X): <u>583657 m</u>	Northing (UTM Y): <u>4365512 m</u>	Horizontal Accuracy: (EPE / FOM / PDOP) <u>5.8</u> <del>Meters</del>

**Photos:** see attached photos + descriptions

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use Data Sheet D- Recreational Use Interview when conducting interviews.)

WBID # 131

Site # 17

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input checked="" type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments: <div style="text-align: center;">             Downstream of            bridge         </div>				

**Evidence of Human Use\*:** (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other: <div style="text-align: center;">  </div>				

**Substrate\*:** (These values should add up to 100%.)

<u>25</u> % Cobble	<u>25</u> % Gravel	% Sand	<u>25</u> % Silt	% Mud/Clay	<u>25</u> % Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

<u>Smartweed along banks</u>
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**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input checked="" type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input checked="" type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

WBID # 131

Site # 17

**Field Data Sheets for Recreational Use Stream Surveys**

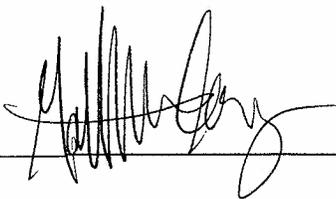
**Data Sheet B – Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature:  Date of Survey: 10/19/07  
Organization: PRS Position: field team leader

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet C - Field Survey Results

Waterbody ID: <u>121</u> Site #: <u>17</u>	
Estimated Channel Incision: <u>1</u> (m) (height between low bank width and water)	
GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM) <u>111</u> UTM X: <u>583680</u> m UTM Y: <u>4365816</u> PDOP <u>4.5</u> (meters) <u>111</u> UTM X: <u>583657</u> UTM Y: <u>4365512</u> PDOP <u>5.8</u> (meters)	
Average Stream Width: <u>20</u> (meters)	Length of Survey Segment: <u>300</u> (meters)
(To determine Length of Reach)	
Field Staff: <u>LS &amp; MC</u>	
Dissolved Oxygen: <u>8.90</u> (mg/L) Dissolved Oxygen: _____ (% sat) Specific Cond: _____ (µS/cm) Water Temperature: <u>16.8</u> (°C)	

Station	01		02		03		04		05		06		07		08		09		10		11	
	Distance (m)	Depth (m)																				
Left Bank	14	20	19	44	14	44	17	41	91	05	22	20	19	20	21	19	22	52	25	76	20	29
	28	33	38	56	28	27	34	62	18	17	45	20	40	26	40	15	44	65	50	73	40	35
	42	58	58	58	42	29	51	71	27	21	67	21	60	24	60	14	66	58	75	64	60	33
	56	54	77	61	56	45	68	66	36	24	89	33	80	22	86	15	88	58	100	74	80	45
	70	46	96	61	70	44	85	74	46	26	112	55	160	32	160	31	111	52	125	69	100	44
	84	43	115	60	84	53	102	72	55	20	134	54	120	54	120	33	133	59	150	53	120	50
	98	27	134	61	98	46	119	70	64	29	156	47	140	53	140	43	155	60	175	45	140	52
	112	38	154	52	112	29	136	62	73	30	178	31	160	34	160	31	177	43	200	41	160	53
	126	21	173	44	126	39	153	41	82	09	201	21	180	29	180	35	200	60	225	32	180	48
Right Bank	145	0	192	0	139	0	175	0	91	0	223	0	196	0	215	0	221	0	249	0	203	0
Feature Type (riffle, run, or pool)	Pool		Pool		Run		Pool		Riffle		Riffle		Riffle		Riffle		Run		Run		Run	

Notes: Transsects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width. GPS locations corresponds to Transsect 01 and 11. Transsects ordered in upstream to downstream order. Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten). Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1). All measurements to be taken to the nearest 0.01 meter.

WBID # 131

Site # 18

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization**

(must be completed for each site)

Date & Time: <u>10/19/07</u> <u>3:30 pm</u>	Site Location Description (e.g., road crossing): <u>Upstream of Rd Kings @ Hwy 15</u>
Personnel (Data Collectors): <u>LS + MC</u>	Facility Name: <u>Lake Village</u>
Current Weather Conditions: <u>Cloudy 65°F</u>	Permit Number: <u>MO 0101454</u>
Weather Conditions for Past 10 days: <u>4.99" rain</u>	
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input checked="" type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): <u>585623 m</u>	Northing (UTM Y): <u>4366785 m</u>	Horizontal Accuracy: (EPE / FOM / PDOP) <u>4.8</u> Meters
Site 11	Easting (UTM X): <u>585812 m</u>	Northing (UTM Y): <u>4366479 m</u>	Horizontal Accuracy: (EPE / FOM / PDOP) <u>4.7</u> Meters

**Photos:** See attached photos + descriptions

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use Data Sheet D- Recreational Use Interview when conducting interviews.)

WBID # 131  
 Site # 18

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input checked="" type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments:				

**Evidence of Human Use\*:** (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other: <i>None</i>				

**Substrate\*:** (These values should add up to 100%)

<i>25</i> % Cobble	<i>25</i> % Gravel	<i>25</i> % Sand	% Silt	% Mud/Clay	<i>25</i> % Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

<i>None</i>
-------------

**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input checked="" type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

WBID # 131

Site # 18

**Field Data Sheets for Recreational Use Stream Surveys**

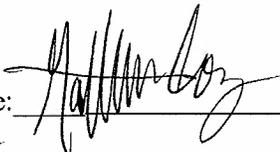
**Data Sheet B – Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature:  Date of Survey: 10/19/07  
Organization: FRS Position: Field Team Leader

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet C - Field Survey Results

Waterbody ID: <u>131</u>	Site #: <u>18</u>
Estimated Channel Incision: <u>0</u> (m) (height between low bank width and water)	
GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM)	
01 UTM X: <u>585623 m</u>	UTM Y: <u>4366785 m</u>
11 UTM X: <u>585812 m</u>	UTM Y: <u>4366479 m</u>
Average Stream Width: <u>20</u> (meters)	Length of Survey Segment: <u>300</u> (meters)
(To determine Length of Reach)	(20x average stream width)
Field Staff: <u>LS + MC</u>	

Dissolved Oxygen	
Date: <u>10/19/07</u>	Time: <u>3:30 pm</u>
Dissolved Oxygen: <u>9.80</u> (mg/L)	
Dissolved Oxygen: _____ (% sat)	
Specific Cond: _____ (µS/cm)	
Water Temperature: <u>18.0</u> (°C)	

Station	Transect Cross-Section																					
	01	02	03	04	05	06	07	08	09	10	11											
Left Bank	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)	Distance (m)											
	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)											
1	1.01	.11	.67	1.10	2.4	3.6	2.2	2.1	2.0	.21	.89	.09	.24	.14	2.6	.21	2.7	.40	2.3	.40		
2	1.2	.14	1.3	1.0	4.8	4.4	3.9	4.0	3.3	4.0	3.3	1.8	.07	4.8	.09	5.2	.20	5.4	.34	4.6	.54	
3	1.8	.13	2.0	1.0	7.2	5.0	6.6	6.0	3.3	6.0	3.3	2.7	.09	7.2	.12	7.8	.24	8.1	.12	7.0	.59	
4	2.4	.18	2.7	.13	9.6	5.0	8.8	8.0	3.0	8.0	4.4	3.6	.11	9.6	.14	10.4	.26	10.8	.43	9.3	.66	
5	3.0	.18	3.4	.15	12.0	5.0	11.0	10.0	2.4	10.0	4.5	4.5	.14	12.0	.12	13.0	.30	13.5	.41	11.7	.68	
6	3.6	.11	4.0	.14	14.0	5.0	13.2	12.0	3.5	12.0	4.9	5.3	.12	14.0	.19	15.6	.25	16.2	.40	14.0	.71	
7	4.2	.10	4.7	.13	16.8	4.4	15.4	14.0	3.5	14.0	6.0	6.2	.07	16.8	.15	18.2	.24	18.9	.40	16.3	.69	
8	4.8	.07	5.4	.11	19.2	5.9	17.6	16.0	3.2	16.0	5.1	7.1	.06	19.2	.24	20.8	.20	21.4	.31	18.6	.50	
9	5.4	.05	6.0	.09	21.6	.70	19.8	18.0	2.3	18.0	4.5	8.0	.62	21.6	.21	23.4	.21	24.3	.12	21.0	.22	
Right Bank	6.1	0	2.31	0	2.11	0	2.22	0	2.04	0	2.04	0	8.9	0	2.35	0	2.56	0	2.70	0	2.37	0
Feature Type (riffle, run, or pool)	Riffle	Pool	Riffle	Riffle	Run	Riffle	Riffle	Run	Riffle	Run	Run	Run	Run	Run	Run	Pool						

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width. GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order. Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten). Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1). All measurements to be taken to the nearest 0.01 meter.

WBID # 131  
 Site # 19

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization**

(must be completed for each site)

Date & Time: <u>10/19/07 4:30p</u>	Site Location Description (e.g., road crossing): <u>Upstream of rd Xing @ Hwy AA</u>
Personnel (Data Collectors): <u>LS &amp; MC</u>	
Current Weather Conditions: <u>P cloudy, 60°F</u>	Facility Name: <u>Lake Village</u>
Weather Conditions for Past 10 days: <u>4.99" rain</u>	Permit Number: <u>MO 0101656</u>
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input checked="" type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)					
Site 01	Easting (UTM X): <u>586811 m</u>	Northing (UTM Y): <u>4365045 m</u>	Horizontal Accuracy: (EPE / FOM / PDOP) <u>6.8</u> Meters		
Site 11	Easting (UTM X): <u>586942 m</u>	Northing (UTM Y): <u>4364802 m</u>	Horizontal Accuracy: (EPE / FOM / PDOP) <u>5.3</u> Meters		

**Photos:** See attached photos + descriptions

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input checked="" type="checkbox"/> Fishing	<input type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use Data Sheet D- Recreational Use Interview when conducting interviews.)  
2 individuals @ Turkey Cr. - WBID 130 confluence; ~~just~~ downstream of confluence on WBID 130

WBID # 131

Site # 19

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B – Site Characterization (continued)**

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments:				

**Evidence of Human Use\*:** (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input checked="" type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other:				

**Substrate\*:** (These values should add up to 100%.)

<u>25</u> % Cobble	<u>25</u> % Gravel	% Sand	<u>25</u> % Silt	% Mud/Clay	<u>25</u> % Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

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**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input checked="" type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

WBID # 131  
Site # 19

**Field Data Sheets for Recreational Use Stream Surveys**

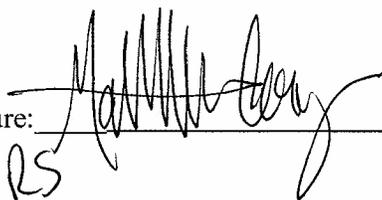
**Data Sheet B – Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature:  Date of Survey: 10/19/07  
Organization: PRS Position: Field Team Leader

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet C - Field Survey Results

Dissolved Oxygen

Waterbody ID: 131 Site #: 19 Date: 10/19/07 Time: 4:30 pm

Estimated Channel Incision: 0 (m) (height between low bank width and water)

Dissolved Oxygen: 9.91 (mg/L)

Dissolved Oxygen: \_\_\_\_\_ (% sat)

Specific Cond: \_\_\_\_\_ (µS/cm)

Water Temperature: 16.9 (°C)

GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM)

01 UTM X: 580811 UTM Y: 4265045 ~~4265048~~ (meters)

11 UTM X: 580941 UTM Y: 4264802 ~~4264805~~ (meters)

Average Stream Width: 25 (meters) Length of Survey Segment: 300 (meters)

(To determine Length of Reach) (20x average stream width)

Field Staff: LS MC

Transect Cross-Section

Station	01		02		03		04		05		06		07		08		09		10		11		
	Distance (m)	Depth (m)																					
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1	>1
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
Right Bank	~20	0	~20	0	~20	0	~20	0	~25	0	~25	0	~25	0	~25	0	~25	0	~25	0	~25	0	~25
Feature Type	Run	Run	Pool																				

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width.

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

**WBID# 0131—Elk Fork Salt River**



**Site# 1 Transect 1, Downstream**



**Site# 1 Transect 1, Upstream**



**Site# 1 Transect 11, Downstream**



**Site# 1 Transect 11, Upstream**

**WBID# 0131**



**Site# 2 Transect 1, Downstream**



**Site# 2 Transect 1, Upstream**



**Site# 2 Transect 11, Downstream**



**Site# 2 Transect 11, Upstream**

**WBID# 0131**



**Site# 3 Transect 1, Downstream**



**Site# 3 Transect 1, Upstream**



**Site# 3 Transect 11, Downstream**



**Site# 3 Transect 11, Upstream**



**Site# 3 Transect 11, Tree stand next to stream**



**Site# 4 Transect 1, Upstream**



**Site# 4 Transect 1, Downstream**

**WBID# 0131**



**Site# 4 Transect 11, Downstream**



**Site# 4 Transect 11, Upstream**



**Site# 5 Transect 1, Downstream**



**Site# 5 Transect 1, Upstream**

**WBID# 0131**



**Site# 5 Transect 11, Downstream**



**Site# 5 Transect 11, Upstream**



**Site# 6 Transect 1, Downstream**



**Site# 6 Transect 1, Upstream**

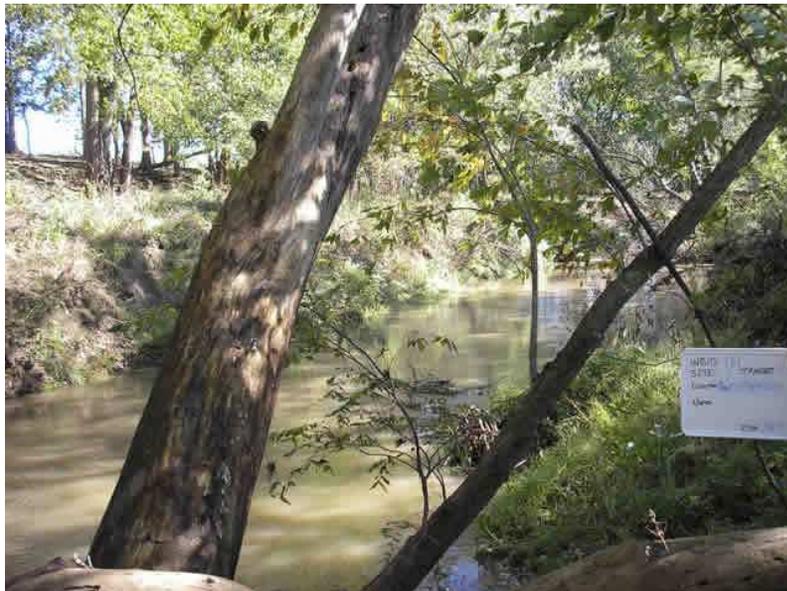
**WBID# 0131—Elk Fork Salt River**



**Site# 6 Transect 11, Downstream**



**Site# 6 Transect 11, Upstream**



**Site# 7 Transect 1, Downstream**



**Site# 7 Transect 1, Upstream**

**WBID# 0131—Elk Fork Salt River**



**Site# 7 Transect 11, Downstream**



**Site# 7 Transect 11, Upstream**



**Site# 8 Transect 1, Downstream**



**Site# 8 Transect 1, Upstream**

**WBID# 0131—Elk Fork Salt River**



**Site# 8 Transect 11, Downstream**



**Site# 8 Transect 11, Upstream**



**Site# 9 Transect 1, Downstream**



**Site# 9 Transect 1, Upstream**

**WBID# 0131—Elk Fork Salt River**



**Site# 9 Transect 11, Downstream**



**Site# 9 Transect 11, Upstream**



**Site# 10 Transect 1, Downstream**



**Site# 10 Transect 1, Upstream**

**WBID# 0131—Elk Fork Salt River**



**Site# 10 Transect 11, Downstream**



**Site# 10 Transect 11, Upstream**



**Site# 11 Transect 1, Downstream**



**Site# 11 Transect 1, Upstream**

**WBID# 0131—Elk Fork Salt River**



**Site# 11 Transect 11, Downstream**



**Site# 11 Transect 11, Upstream**



**Site# 11 Transect 5, Creek access**



**Site# 12 Transect 1, Upstream**

**WBID# 0131—Elk Fork Salt River**



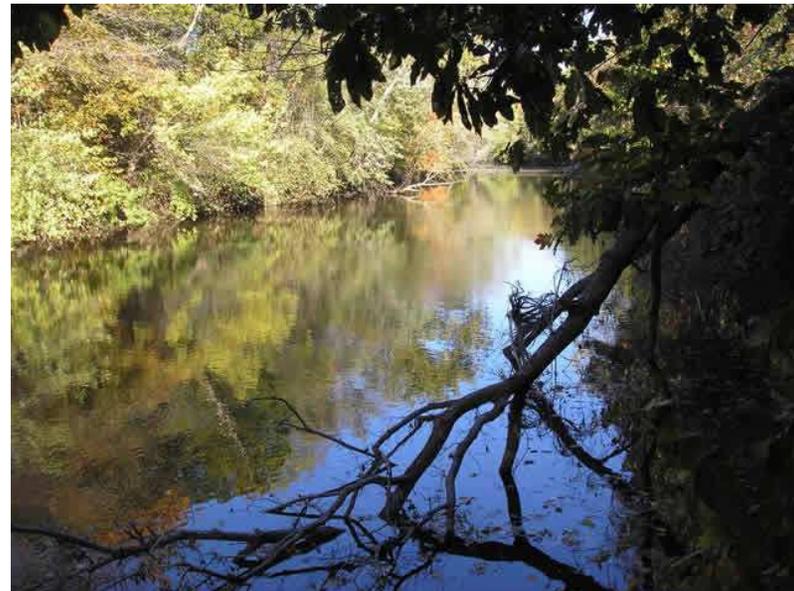
**Site# 12 Transect 1, Downstream**



**Site# 12 Transect 11, Upstream**



**Site# 12 Transect 11, Downstream**



**Site# 13 Transect 1, Upstream**

**WBID# 0131—Elk Fork Salt River**



**Site# 13 Transect 1, Downstream**



**Site# 13 Transect 11, US (Union covered bridge)**



**Site# 13 Transect 11, Downstream**



**Site# 13 Transect 11, Fishing tackle**

**WBID# 0131—Elk Fork Salt River**



**Site# 13 Transect 11, Footpath to fishing site**



**Site# 13 Transect 11, Road adjacent to creek**



**Site# 14 Transect 1, Downstream**



**Site# 14 Transect 1, Trout line**

**WBID# 0131—Elk Fork Salt River**



**Site# 14 Transect 1, Upstream**



**Site# 14 Transect 11, Downstream**



**Site# 14 Transect 11, Upstream**



**Site# 15 Transect 1, Downstream**

**WBID# 0131—Elk Fork Salt River**



**Site# 15 Transect 1, Upstream**



**Site# 15 Transect 11, Downstream**



**Site# 15 Transect 11, Upstream**



**Site# 16 Downstream**

**WBID# 0131—Elk Fork Salt River**



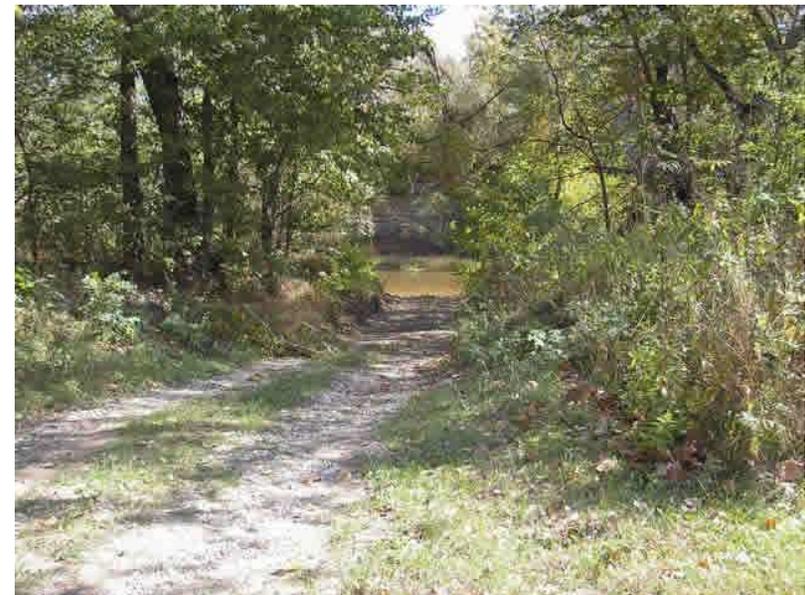
**Site# 16 Transect 1, Upstream**



**Site# 16 Transect 11, Downstream**



**Site# 16 Transect 11, Upstream**



**Site# 16 Boat ramp in Cedar Bluff CA**

**WBID# 0131—Elk Fork Salt River**



**Site# 16 Cedar Bluff Conservation Area**



**Site# 16 Footpaths in Cedar Bluff CA**



**Site# 17 Transect 1, Upstream**

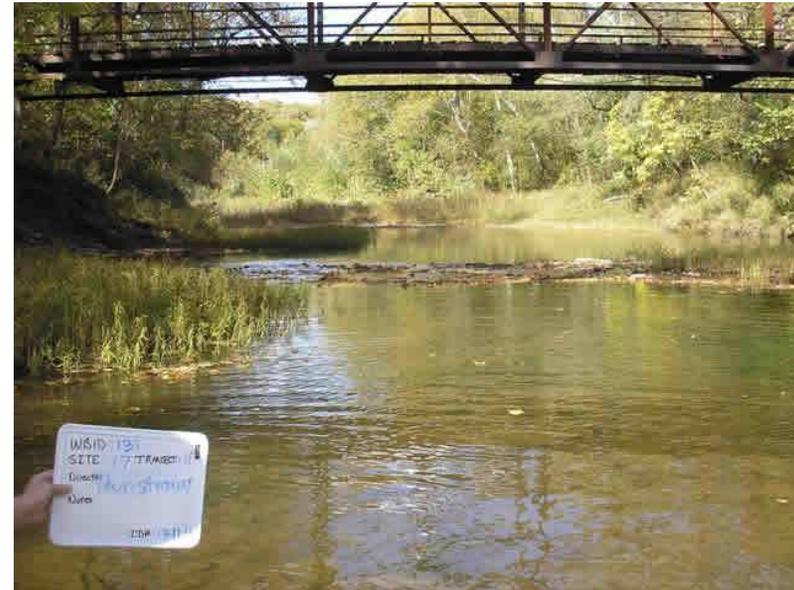


**Site# 17 Transect 1, Downstream**

**WBID# 0131—Elk Fork Salt River**



**Site# 17 Transect 11, Upstream**



**Site# 17 Transect 11, Downstream**



**Site# 18 Transect 1, Upstream**

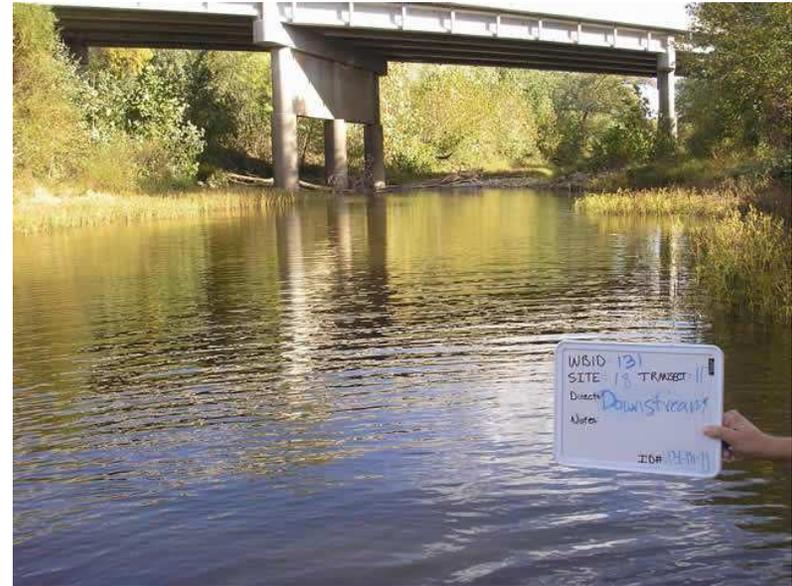


**Site# 18 Transect 1, Downstream**

**WBID# 0131—Elk Fork Salt River**



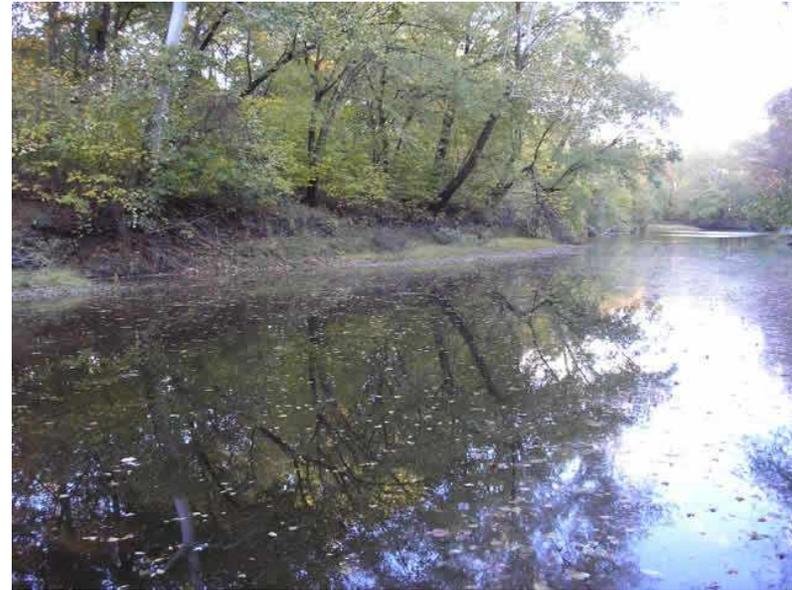
**Site# 18 Transect 11, Upstream**



**Site# 18 Transect 11, Downstream**



**Site# 19 Transect 1, Upstream**



**Site# 19 Transect 1, Downstream**

**WBID# 0131—Elk Fork Salt River**



**Site# 19 Transect 11, Upstream**



**Site# 19 Transect 11, DS with man fishing**



**Site# 19 Transect 1, Fishing poles**



**Site# 19 Transect 1, Road to fishing access**